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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RAM K. RAMESH and MICHAEL J. ROSINSKI

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Appeal 2008-1832  
Application 09/764,673  
Technology Center 3700

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Decided<sup>1</sup>: March 17, 2009

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Before LINDA E. HORNER, JOHN C. KERINS, and STEFAN  
STAICOVICI, *Administrative Patent Judges*.

KERINS, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> The two month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

## STATEMENT OF THE CASE

Ram K. Ramesh and Michael J. Rosinski (Appellants) seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 29-48 and 50-57, the only claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We REVERSE.

## THE INVENTION

Appellants' claimed invention is to a process for making a backseamed casing involving forming a multi-layer heat shrinkable film comprising at least three layers made of particular polymeric materials, the intermediate second layer being a polyester or polyamide, and having a thickness of at least 5% of the total thickness of the film, with the process further involving wrapping the film longitudinally around a forming shoe with opposing length film sheet edges being overlapped or abutted, sealing the film longitudinally to form a backseam, followed by forwarding the film. (Appeal Br., Claims Appendix, Claim 29). Claim 29, reproduced below, is representative of the claimed subject matter:

29. A process for making a backseamed casing, comprising:

(A) preparing a multilayer heat-shrinkable film comprising:

(i) a first outer layer serving as an inside casing layer, the first outer layer comprising a first polyolefin comprising at least one member selected from the group consisting of:

(a) ethylene/unsaturated acid copolymer, propylene/unsaturated acid copolymer, and butene/unsaturated acid copolymer, wherein the unsaturated acid is present in an amount of at least 4 weight percent, based on the weight of the copolymer; and

(b) anhydride-containing polyolefin comprising an anhydride-functionality, wherein the anhydride functionality is present in an amount of at least 1 weight percent, based on the weight of the anhydride-containing polyolefin;

(ii) a second layer comprising at least one member selected from the group consisting of polyester and a first polyamide; and

(iii) a third layer serving as an outside casing layer, the third layer comprising at least one member selected from the group consisting of second polyolefin, polystyrene, and a second polyamide; and

wherein the second layer is between the first layer and the third layer, with the film having a thickness of at least 5% of a total thickness of the heat-shrinkable casing film;

(B) wrapping the film longitudinally around a forming shoe with opposing length film sheet edges being overlapped or abutted with one another;

(C) sealing the film longitudinally to form a backseam; followed by

(D) forwarding the film.

### THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Anderson	US 3,130,647	Apr. 28, 1964
Schirmer	US 4,448,792	May 15, 1984
Ohya	EP 0 149 321	Jul. 24, 1985

The Examiner has rejected:

(i) claims 29-38, 40-48, and 50-57 under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of Ohya;

(ii) claim 39 under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of Ohya and Schirmer.

### ISSUE

The Examiner concluded that the combined teachings of Anderson and Ohya would have rendered obvious a process for making a backseamed casing by preparing a multilayer heat-shrinkable film as claimed, wrapping the film longitudinally around a forming shoe, sealing the film longitudinally to form a backseam, and forwarding the film.

Appellants urge that the Anderson patent, relied on by the Examiner as teaching a forming shoe, does not disclose a forming shoe, as that term would be understood in the art, around which the film is wrapped in producing the seamed product.

The issue joined in this appeal is: have Appellants shown that the Examiner erred in finding that the Anderson patent discloses a process in which a film is wrapped around a forming shoe?

## FINDINGS OF FACT

The following enumerated findings of fact (FF) are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

FF 1. Figure 13 of Anderson shows that element 43 is sized so as to occupy only a small portion of the interior of the tube of wrapped film 41, and does not play a role in determining the width of the tube. (Anderson, Fig. 13).

FF 2. The element in Anderson that does determine the width of the tube being produced is the funnel- or conic- shaped folding element shown in Figure 13. (Anderson, Fig. 13; col. 5, ll. 14-16).

## PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, \_\_\_, 127 S. Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). See also *KSR*, 550 U.S. at \_\_\_, 127 S. Ct. at 1734

(“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”).

In proceedings before the USPTO, “‘claims ... are to be given their broadest reasonable interpretation consistent with the specification, and ... claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *In re Bond*, 910 F.2d 831, 833 (Fed. Cir. 1990)(quoting *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). The determination as to the broadest reasonable interpretation to be given to a claim should take into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

## ANALYSIS

### *Claims 29-38, 40-48, and 50-57*

The Examiner rejects these claims as being unpatentable in view of the combined teachings of the Anderson patent and the published European Patent Application in the name of Ohya. More specifically, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to perform a process, using the film material disclosed in Ohya, on the apparatus disclosed by Anderson to produce a backseamed casing, and that this combination meets the limitations of Appellants’ claims. (Answer 3-4).

In reaching this conclusion, the Examiner initially asserts that element 43 of the Anderson apparatus is a forming shoe. (Answer 3). Shifting somewhat from that assertion, the Examiner further appears to contend that the funnel- or conic-shaped element (no reference numeral provided) of

Anderson is a forming shoe, that element 43 is a “forming shoe element”, and that the film material is “wrapped around the interior of the forming shoe and around the outside of forming shoe element 43”. (Answer 7). Finally, the Examiner states that element 43 of Anderson is considered to be an essential part of the forming shoe, that the film is wrapped around it in forming the seam, and that the claims fail to differentiate a forming shoe from a sealing member. (*Id.*).

Appellants do not contest the propriety of combining the teachings of the Ohya reference with the teachings of Anderson. (Appeal Br., *passim*; Reply Br.<sup>2</sup>, *passim*). Rather, as succinctly stated in Appellants’ Reply Brief, resolution of this appeal hinges on one issue, “whether ANDERSON discloses wrapping a film around a forming shoe.” (Reply Br. 2).

Appellants contend that a forming shoe is understood by those skilled in the art to be the portion of the backseaming machine that a film wraps around so that the resulting backseamed casing has a desired size and uniform shape. (Reply Br. 3). Appellants’ argue that the forming shoe in Anderson is the funnel- or conic- shaped member which folds the flat film into a tubular shape. (*See, id.*, “...in ANDERSON, the film is positioned *inside* the forming shoe.”)(emphasis in original).

Appellants direct our attention, in support of their contentions, to the following passage in their Specification:

In the production of backseamed casings (e.g., using a backseaming machine such as a Nishibe HSP-250-SA backseaming machine obtained from Nishibe Kikai Co. Ltd. of Nagoya, Japan), a flat

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<sup>2</sup> The Reply Brief in this appeal was considered and entered into the record on appeal, as reported in Paper No. 20070817, mailed August 22, 2007.



sheet of film is folded longitudinally by passage over a “forming shoe”. *A forming shoe is a part of the backseaming machine which the film is passed under and around, i.e., so that the initially flat film is reconfigured as a tube, having a longitudinal overlap and seal therealong (lap-sealed backseamed casing), or with film longitudinal edges abutted against one another (butt-sealed backseamed casing), with the width of the tube being determined by the circumference of the forming shoe. A longitudinal lap or butt seal is then applied while the film is between the forming shoe and a sealing device, resulting in a lap-sealed backseamed casing, or a butt-sealed backseamed casing.*

Specification, p. 2, ll. 11-21 (emphasis added in Reply Br. at 5).

Appellants contend that this passage evidences that a forming shoe is a separate element from a sealing device in a backseaming apparatus (Reply Br. 5), and that element 43 in Anderson, and its opposed element 44, are a sealing means or device, and not a forming shoe. (Reply Br. 4). The quoted passage does not, however, exclude the possibility that a forming shoe could play a role in the sealing process (*e.g.*, the sealing device and the forming shoe could be opposed elements, with the film being advanced through a nip between them to produce a seal), and this appears to be the most logical interpretation in the context of the entire passage, which notes that the lap or butt seal is applied while the film is between the forming shoe and the sealing device.

The cited passage from the Specification does, however, evidence that the term “forming shoe”, as defined by Appellants and as would be understood by those of ordinary skill in the art, is an element in known, commercially-available backseaming machines (such as those identified in

the Specification), in “which the film is passed under or around, i.e., so that the initially flat film is reconfigured as a tube, ... , *with the width of the tube being determined by the circumference of the forming shoe.*” (Spec., p. 2, ll. 14-18)(emphasis added). Thus, the broadest reasonable interpretation of the term “forming shoe” in light of the guidance provided by the Specification, is an element employed to shape a flat film into a tubular shape, having a circumferential size that is determinative of the width of the tubular material being produced.

Looking to Figure 13 of Anderson, it is plainly apparent that the construction of element 43, which is sized so as to occupy only a small portion of the interior of the tube of wrapped film 41, is not sized so as to determine the width of the finished tube. (FF 1). As such, element 43 can not reasonably be said to constitute a forming shoe as would be understood by those of ordinary skill in the art, guided by Appellants’ Specification. That the film material is wrapped around element 43 in processing the film is not germane to the step recited in claim 29.

The element in Anderson that does determine the width of the tube being produced, and is thus properly characterized as a forming shoe, is the funnel- or conic- shaped folding element shown in Figure 13. (FF 2). While the Examiner does assert that the film material in Anderson is “wrapped around the interior of the forming shoe” (Answer 7), we agree with Appellants’ contention that the film material is not “wrapped around”, but rather passes inside, the Anderson forming shoe. The Examiner’s interpretation so distorts the conventional, ordinary meaning of the term

“wrap”<sup>3</sup> -- the film material does not cover, envelop or encase the Anderson forming shoe -- that the position taken by the Examiner extends beyond the broadest reasonable interpretation of the claim language.

The limitation requiring that the process include a step of “wrapping the film longitudinally around a forming shoe” is present in independent claims 29 and 48, as well as all claims depending therefrom. Appellants have thus established that the conclusion reached by the Examiner in rejecting claims 29-38, 40-48, and 50-57 is in error. We will, accordingly, not sustain the rejection of claims 29-38, 40-48, and 50-57 under 35 U.S.C. § 103(a) as being unpatentable over Anderson in view of Ohya.

#### *Claim 39*

Claim 39 was rejected as being unpatentable over Anderson in view of Ohya and Schirmer. Appellants do not present any additional arguments for the separate patentability of this claim. However, this claim, which depends indirectly from claim 29, includes the limitation that the film is wrapped longitudinally around a forming shoe, a feature not disclosed or suggested by the combination of Anderson and Ohya. The Examiner does not identify any portion of the Schirmer patent that remedies the deficiency of the Anderson and Ohya references in this respect. Accordingly, the rejection of claim 39 under 35 U.S.C. § 103(a) based on the combined teachings of Anderson, Ohya, and Schirmer, is in error and will not be sustained.

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<sup>3</sup> wrap: 1. To arrange or fold (something) about as cover or protection; 2. To cover, envelop, or encase, as by folding or coiling something about. *The American Heritage® Dictionary of the English Language, Fourth Edition* (2006).

CONCLUSION

Appellants have established that reversible error exists in the rejection of claims 29-48 and 50-57 under 35 U.S.C. § 103(a).

ORDER

The decision of the Examiner to reject claims 29-48 and 50-57 is reversed.

REVERSED

JRG

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